

**Patent Claims**

1. A method for application of the main insulation to conductor bars, in particular conductor bars for stator windings, with the conductor bars having a rectangular cross section, and the method comprising the following steps:
  - a) connection of the individual conductor bars to form a quasi-infinite conductor bar with a rectangular cross section;
  - b) continuous sheathing of the quasi-infinite, rectangular conductor bar with main insulation;
  - c) cutting out or detaching of the unusable connecting points.
2. The method as claimed in claim 1, wherein, in step a, conductor bars which extend in straight lines are used and the sheathing in step b is carried out with an elastomer, preferably with a silicone elastomer.
3. The method as claimed in one of the preceding claims, wherein the sheathing in step b is carried out by means of an extrusion process.
4. The method as claimed in one of the preceding claims, with the method comprising a further step;
  - d) bending of the evolvent of the insulated conductor bars.
5. The method as claimed in claim 1, wherein curved conductor bars are used in step a, and the sheathing in step b is carried out using a thermoplastic or an elastomer, in particular a silicone elastomer.
6. The method as claimed in one of claims 1, 2, 4 or 5, wherein the sheathing in step b is carried out by means of a blow forming process.

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7. The method as claimed in one of the preceding claims, wherein internal corona-discharge protection is additionally fitted between the main insulation and the conductor surface in step b, with the adhesion between  
5 the internal corona-discharge protection and the main insulation being greater than the adhesion between the internal corona-discharge protection and the conductor surface.
- 10 8. The method as claimed in one of the preceding claims, wherein slot corona-discharge protection and/or turning point are/is applied in step b.
- 15 9. The method as claimed in one of the preceding claims, wherein conductor bars composed of individual conductors are used, with the individual conductors preferably having a rectangular cross section.
- 20 10. The method as claimed in claim 9, wherein the individual conductors are provisionally connected to one another.
- 25 11. The method as claimed in one of claims 9 or 10, wherein the conductor bars are not transposed in the area of the evolvent step.
12. Insulated conductor bars, manufactured in accordance with one of the above method claims.
- 30 13. A bending apparatus for use in one of the above methods, wherein a protective layer (22) is arranged in the area of the bending tools (20).